Date: User: Friday, 5/26/2006 1:50:44 PM

Linda Lacelle

Process Sheet

Customer

: CU-DAR001 Dart Helicopters Services

Job Number

: 27263

Estimate Number

: 10559

P.O. Number This Issue

Prsht Rev.

First Issue

Previous Run

:NIA

: 5/26/2006

S.O. No. : NIX

: NC

: NIA : 27262

: LANDING GEAR

Part Number

Drawing Name

Drawing Number

: D412664203

: D412-664-243 REV B : N/A

: HIGH AFT X-TUBE 412

Project Number Drawing Revision

: B

Material

Due Date

:NIA : 6/30/2006

Qty:

Um:

Each

Written By **Checked & Approved By**

Comment

: Est Rev:E 04.02.16

Reformat; Added D3189-1 K/DS

Est Rev:F 06-03-29

Remove Coments on Pick List JLM

Additional Product

Job Number:



Seq. #:

Machine Or Operation:

Description:

1.0

DC

DOCUMENT CONTROL

Crosstube Material

Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels as per PPP D412-664-203 CHG 003

KJ 06.10.03

2.0

Comment: Qty.:

1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part number Description Batch

1 D6009-129 Crosstube 725947

Check OD = 3.500"; ID = 2.250"

BC

06-06 103

3.0

MORI SEIKI

MORI SEIK! CNC LATHE LARGE







Comment: MORI SEIKI CNC LATHE LARGE

1-Fill tube with sand & install plugs DT8534 on both ends as per Folio FA166

2-Turn first side as per Folio FA166

3-Deburr & Inspect for surface damage. Repair damage within limits as per Dwg D412-664-243.

4.0

QC1

INSPECT ALL DIM TO DIM SHEET





Comment: INSPECT ALL DIM TO DIM SHEET

BC-

W/O:		WORK ORDER CHANGES											
DATE	STEP	PROCEDURE CHANGE	E	Ву	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector					
:							73						

-NCR:		W	ORK OR	DER NON-CONFORMANCE (NCR)	***************************************		
		Description of NC		Corrective Action Section B	Verification	Approval	Approval
DATE	STEP	Section A	Initial Design Mgr	Action Description Sign & Date	Section C	Design Mgr	QC Inspector
						.	{
		•	-			T	
		(2					
			·				

Part No:	PAR #:	Fault Category: N	ICR:	Yes	No	DQA:	Date:
& initial all entries				QA: N	/C C	osed:	Date:

Assurance\approved forms\NCRWO revC

Friday, 5/26/2006 1:50:45 PM Date: User: ' Linda Lacelle **Process Sheet** Drawing Name: HIGH AFT X-TUBE 412 Customer: CU-DAR001 Dart Helicopters Services Part Number: D412664203 Job Number: 27263 Job Number: Seq. #: **Machine Or Operation:** Description: MORI SEIKI CNC LATHE LARGE MORI SEIKI 5.0 Comment: MORI SEIKI CNC LATHE LARGE 1-Turn second side as per Folio FA166 2-Deburr & Inspect for surface damage. Repair damage within limits as per Dwg D412-664-243. 3-Polish entire outside surface of crosstube 4- Remove sand and plugs 5-Scribe part # and batch # using vibrating stylus as per Dwg D412-664-243 INSPECT ALL DIM TO DIM SHEET 6.0 QC1 Comment: INSPECT ALL DIM TO DIM SHEET SECOND CHECK 7.0 QC8 6 06/06/05 Comment: SECOND CHECK HAND FINISHING RESOURCE #1 HAND FINISHING 8.0 Comment: HAND FINISHING RESOURCE #1 06-06-08 Chemical Conversion Coat as per QSI 005 4.1 INSPECT WORK/WING WALK 9.0 QC3/5 Comment: Inspect work & Chemical conversion Coat 10.0 BENDING Comment: BENDING MACHINE Bend tube as per Dwg D412-664-243 using CNC bender program 412-af and Folio FT010 11.0 DIMENSIONAL CHECK Comment: DIMENSIONAL CHECK

W/O:	***	WORK ORDER CHANGES					
DATE	STÉP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector
V	1				-		
				·,	-		

NCR:		•	. 7	WORK OR	DER NO	N-CONFOR	RMANCE	(NCR)			-
		Descr	iption of NC		Corrective Action Section B			Verification	Approval	Approval	
DATE	STEP	Section: A		Initial Design Mgr	Act	Action Description Design Mgr		Sign & Date	Section C	Design Mgr	Approval QC Inspector
			-						٠		# # # # # # # # # # # # # # # # # # #
				-	<i>1</i> 1	•		. *		7	
		1 m	1 C				***************************************			~_	-
· 		1 स्ट	*			•.			4		
						·				,	
			,								
						, ·					
i			-					9			•

Part No:	PAR #:	Fault Çategory:	NCR:	Yes No DQA:	Date:
NOTE: Date & initial all entries				QA: N/C Closed:	Date:

Friday, 5/26/2006 1:50:45 PM Linda Lacelle User: **Process Sheet** Drawing Name: HIGH AFT X-TUBE 412 Customer: CU-DAR001 Dart Helicopters Services Part Number: D412664203 Job Number: 27263 Job Number: Seq. #: **Machine Or Operation:** Description: LANDING GEAR 1 LANDING GEAR RESOURCE 1 12.0 Comment: LANDING GEAR RESOURCE 1 1-Drill pilot holes in tube as per Dwg D412-664-243 using drill Jig DT8550 & DT8551 2-Ream hole to finish size in tube as per Dwg D412-664-243using drill Jig DT8550 & DT8551 Check for 36 79 dimensions between holes, both sides on both cuffs, to ensure alignment with saddle holes. 3-Deburr & Inspect for surface damage. Repair damage within limits as per Dwg D412-664-243 /m '06-0 9-8// HAND FINISHING RESOURCE #1 13.0 HAND FINISHING! Comment: HAND FINISHING RESOURCE #1 Chemical Conversion Coat as per QSI 005 4.1 14.0 Comment: Sub-Contracting OUTSIDE SERVICES Liquid Penetrant Inspection as per QSI 038Or C 20610 9111 Issue P/O: 1998 LPI as per ASTM 1417 Level 2 Attach copy of NDT results to work order PACKAGING RESOURCE #1 15.0 PACKAGING 1 Comment: PACKAGING RESOURCE #1 Inspect for transit damage Ensure copy of NDT results attached to work order. DIMENSIONAL CHECK 16.0 QC6 Comment: Inspect for damage & ensure results are as per Dwg D412664-203 SPRAY PAINTING 17.0 Comment: SPRAY PAINTING 1-Prime inside and outside crosstube as per QSI 005 4.2 2-Paint outside crosstube with White Imron as per QSI 005 4.2

W/O:		WORK ORDER CHANGES									
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector				
06-04-11	ní	Add QC5 pen. change				B					
	13-1	QC S	1	06-09-11	1	2920	100.05.11				
		· .									

NCR:		W	ORK OR	DER NON-CONFORMANCE (I	NCR)			***************************************
		Description of NC		Corrective Action Section B	,	Verification	Approval	Approxal
DATE	STEP	Section A	Initial Design Mgr		Sign & Date	Section C	Approval Design Mgr	Approval QC Inspector
							/	_
				·				-

Part No:	PAR #:	Fault Category:	NCR:	Yes	No	DQA:	Date:
NOTE: Date & initial all entries				QA: N	I/C CI	osed:	Date:

Date: Friday, 5/26/2006 1:50:45 PM User: Linda Lacelle **Process Sheet** Drawing Name: HIGH AFT X-TUBE 412 Customer: CU-DAR001 Dart Helicopters Services Part Number: D412664203 Job Number: 27263 Job Number: Seq. #: Description: **Machine Or Operation:** Inspect Spray Paint 18.0 QC14 Comment: Inspect Spray Paint Wrap in plastic bag to protect from scratches 19.0 Abrasion Strip Comment: Qty.: 1.7640 f(s)/Unit Total: 1.7640 f(s) Pick: Description Qty Part number Batch 2 D2856-600(Cut to 10.090") Abrasion Strip 624318 20.0 D2856600 Comment: Qty.: 1.0080 f(s)/Unit Total: 1.0080 f(s) Pick: Qty Part number Description Batch 2+ 06 - 09 - 28 1 D2856-600(Cut to 10.870") Abrasion Strip **B24328** 21.0 D28961 Support Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s) Pick: **Description Batch** Qty Part number 06-09-28 Support **B2**6683 1 D2896-1 D31891 Chafing Shield 22.0 Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s) Pick: **Description Batch** Qty Part number 06-09-28 Chafing Sheild B27 90 2 D3189-1 MS2192028 Clamp(per MIL-DTL-8783C) Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s) Pick: **Description Batch** Qty Part number 06-09-28 MS21920-28 Clamp M101684

W/O:			WO	RK ORDER CHANGES	3	100000000000000000000000000000000000000	······································	
DATE	STEP	PR	OCEDURE CHAN	IGE	Ву	Date Qty	Approval Mfg / Design Mgr	Approval QC Inspector
				·····				
NCR:			WORK ORDE	R NON-CONFORMAN	CE (NCR)		
DATE	STEP	Description of NC	1	Corrective Action Section B	Cian 8	Verification	Approval	Approval
DAIE	O.C.	Section A	Initial Design Mgr	Action Description Design Mgr	Sign & Date	Section C	Design Mgr	QC Inspector
								_
					į			
					, 			
								!
Part No):	PAR #:	Fault Category	: NCR:	Yes No	DQA:	Date:	
NOTE: D	ate & initial a	Il entries			QA: N/C CI	nead:	Date:	٠.

H:\forms\Quality Assurance\approved forms\NCRWO revC

Date: Friday, 5/26/2006 1:50:45 PM User: ' Linda Lacelle **Process Sheet** Drawing Name: HIGH AFT X-TUBE 412 Customer: CU-DAR001 Dart Helicopters Services Job Number: 27263 Part Number: D412664203 Job Number: Seq. #: Description: **Machine Or Operation:** 24.0 MS2192030 clamp(per MIL-DTL-8783C) Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s) Pick: **Description Batch** 27 06-09-28 Qty Part number Clamp M/01568 2 MS21920-30 LANDING GEAR 1 LANDING GEAR RESOURCE 1 25.0 Comment: LANDING GEAR RESOURCE 1 06-09-Assemble as per Dwg D412-664-203 INSPECT WORK TO CURRENT STEP 26.0 QC5 WORK TO CURRENT STEP Comment: INSPECT 27.0 PACKAGING 1 Comment: PACKAGING RESOURCE #1 Pick Packing Kit 28.0 AN640A Bolt Comment: Qty.: Total: 4.0000 Each(s) Bolt Batch: 29.0 Comment: Qty.: Total: 2.0000 Each(s) Bolt 30.0 Washer Total: 18.0000 Each(s) Comment: Qty.: 18.0000 Each(s)/Unit Washer Batch: M/0/697

W/O:			WO	RK ORDER CHANGES	}				
DATE	STEP	PRO	OCEDURE CHAP	NGE .	Ву	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector
NCR:			WORK ORDE	R NON-CONFORMAN	CE (NCR)			
		Deceription of NC		Corrective Action Section B		\/:f:			
DATE	STEP	P Description of NC Section A	Initial Design Mgr	Action Description Design Mgr	Sign & Date		cation tion C	Approval Design Mgr	Approval QC Inspector
				· · · · · · · · · · · · · · · · · · ·				;	Y
							<u></u>		
Part No	_	PAR #:	Fault Category	r: NCR: `	Yes (No)	DQA:			16/18/13

						1	
Part No:	PAR #:	Fault Category:	NCR:	Yes No D	QA:	Date: _∂∂	6/18/03
NOTE: Date & initial all entries				QA: N/C Clos	sed:	Date:	

Date: * Friday, 5/26/2006 1:50:45 PM User: Linda Lacelle **Process Sheet** Drawing Name: HIGH AFT X-TUBE 412 Customer: CU-DAR001 Dart Helicopters Services di Part Number: D412664203 Job Number: 27263 Job Number: Description: Seq. #: **Machine Or Operation:** MS21042L6 Nut 31.0 Comment: Qty.: 6.0000 Each(s)/Unit Total: 6.0000 Each(s) Nut 11100151 Batch: QC4 INSPECT 100% KITS FOR COMPLETENESS 32.0 C206/10/0 20 KITS FOR COMPLETENESS Comment: INSPECT PACKAGING 1 PACKAGING RESOURCE #1 33.0 **Comment: PACKAGING RESOURCE #1** Identify and pack for shipping as per PPP D412-664-203 Location: PPP Rev: 34.0 DC W Volv.03 Comment: DOCUMENT CONTROL Inspection Level 21 Job Completion

W/O:	W/O: WORK ORDER CHANGE			RK ORDER CHANGES	i				
DATE	STEP	PR	OCEDURE CHAN	GE	Ву	Date Qty	Approval Mfg / Design Mgr	Approva QC Inspector	
NCR:				R NON-CONFORMAN	CE (NCR	2)	·		
DATE	TE STEP Description of NC		Corrective Action Section B		Sign &	Sign & Verification		Approval	
		Section A	Initial Design Mgr	Action Description Design Mgr	Date	Section C	Design Mgr	QC Inspector	
		-							
				·				\rangle -	
	-							1	
		,							
ı									
Part No):	PAR #:	Fault Category	: NCR: `	res No	DQA: _	Date:		
NOTE: C	ate & initial					osed:			

DART AEROSPACE LTD	Work Order:	27263
Description: Crosstube Assembly (412 High Aft)	Part Number:	D412-664-243
Inspection Dwg: D412-664-243 Rev: B		Page 1 of 1

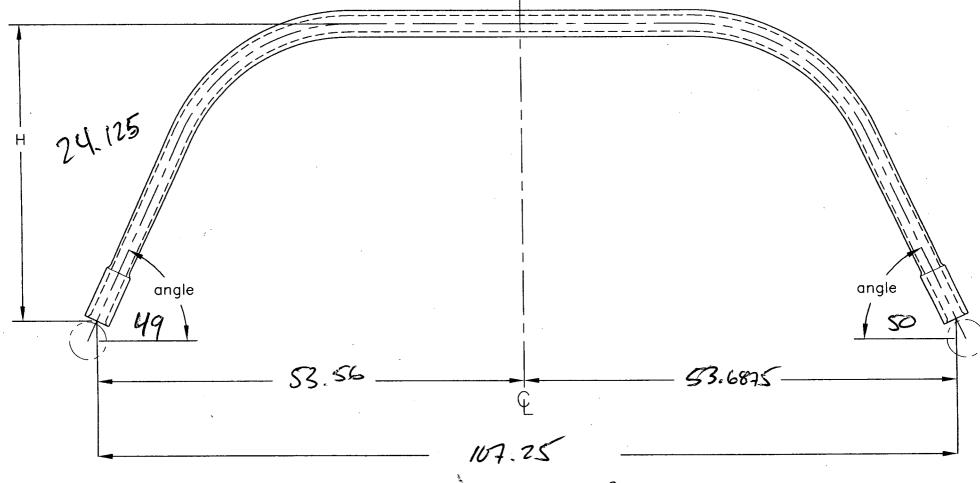
FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

Inspection Sheet Drawing Dimension		sion Dimens		Accept	Reject	Method of Inspection	Comments
	2.684	+0.005/-0.000	2.688				
	2.748	+0.005/-0.000	2.752				
	2.884	+0.005/-0.000	7.888				
	3.019	+0.005/-0.000	3.074				
	3.163	+0.005/-0.000	3.166				
	3.308	+0.005/-0.000	3.311				
<	3.429	+0.005/-0.000	3.432	_			
SIDE	2.990	+0.005/-0.000	2.993	√			
S	2.618	+0.005/-0.000	2.622	_			
	0.200	+/-0.010	.700				
	R0.063	+/-0.010	-563	<u></u>			
	R0.500	+/-0.010	.500				
	4.971	+/-0.001	4.971				
	2.684	+0.005/-0.000	7.689				
	2.748	+0.005/-0.000	7.753				
ļ	2.884	+0.005/-0.000	2.884				
	3.019	+0.005/-0.000	3.024		•.		
	3.163	+0.005/-0.000	3.166				
	3.308	+0.005/-0.000	3.712				
	3.429	+0.005/-0.000	3.432				
Ш	2.990	+0.005/-0.000	7-993				
SIDE	2.618	+0.005/-0.000	2.621				
0,							
	0.200	+/-0.010	. 200	-			
	R0.063	+/-0.010	(-3				
	R0.500	+/-0.010	.500				
	4.971	+/-0.001	4.971				
	124.09	+/-0.020	17-1.09	_			

Measured by:	Audited by:	J.G	Prototype Approval:	N/A
Date: 06.05.30	Date:	06106165	Date:	N/A

R	ev	Date	Change		Revised by	Approved
	4	04.06.16	New Issue	(P/O D412-664-203)	KJ/JLM	
	В	06.03.09	Dwg Rev updated		KJ/JLM	



DATE: 06-06-25

DESCRIPTION: 412-664-203

BATCH NO: 277.63

DRAWING: 412-664-243

H: 24.37 7 + 06

1/2 SPAN: 53.72

TOTAL SPAN: 107-44

ANGLE: 50 +2

-. 070 aut of tol.

2000.29



w.o. Nº 34841

A.M.O. Number: 46/90

NON-DESTRUCTIVE TESTING REPORT

REGISTRATION: - Total Hr/ldg:	MODEL/TYPE: OPERATED BY:	- §	BASED AT:
		<u> </u>	BASED AT:
	INSPECTION	ON REQUIREMENTS	
Carry out FPI of (5) of Section 4.1.1 (on file	cross tubes (external surfa at client) - parts delivered	ace) as per ASTM E-14	17-05 and the Dart QSI 038,
Qty (2) P/N D20 Qty (3) P/N D4	06-667-203 Cross tubes 12-664-203 Cross tubes	S/N's B28058 and B S/N's B27181, B272	28374. 63 and B27177.
RADIOGRAPHY	ULTRASONIC	PENETRANT M	AGNETIC PARTICLE EDDY CUR
	25E Batch #04B503. s inspected. (5) PASSEI	D inspection / (0) FAI	LED inspection.
THE MAINTENAN	CE DESCRIBED ABOVE HAS BEEN PERFORM THE APPLICABLE STANDARDS OF AIRWAY	MED IN ACCORDANCE WITH	September 13, 2006 INSPECTION STAMP(S)
CUSTOMER: Dart Aerospa		MER INFORMATION	P.O. NUMBER 1998 Linda CONTACT NAME:
ADDRESS:			
ADDRESS:	• F.) 613- 632	2- 1053	\$
	• F) 613- 632	2-/053	\$ GST PST